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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,089

06/20/2005

Per-Ingvar Branemark

2816-4

6438

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7590

12/22/2008

THE MAXHAM FIRM

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SAN DIEGO, CA 92121

EXAMINER

WOODALL, NICHOLAS W

ART UNIT

PAPER NUMBER

3775

MAIL DATE

DELIVERY MODE

12/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/540,089	Applicant(s) BRANEMARK, PER-INGVAR	
	Examiner Nicholas Woodall	Art Unit 3775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-14, 16-20, 22-34 and 36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-14, 16-20, 22-34 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/03/2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-14, 16-20, 22-34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Branemark (U.S. Patent 5,171,284) in view of Lemos (U.S. Patent 3,979,829).

Branemark discloses a titanium device comprising a generally cylindrical anchoring portion formed with an insertion end and having an external screw thread (6), a cavity having a circular cross-section that widens towards the insertion end and opens out at the insertion end, and a plurality of through-penetrating cutting slots (8 and 9) extending from the insertion end that connect the cavity to the outside of the anchoring portion. The slots including a leading slot wall surface and a trailing slot wall surface

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related to the direction of rotation, wherein each surface faces into the slot and the outermost portion of the trailing wall surface defines a cutting edge. Branemark fails to disclose the device wherein the cutting edge of the trailing slot wall surface is at an acute angle relative to the outside of the anchoring portion with the radial direction and the trailing slot wall surface sloping obliquely forward from within and outwardly in the direction of rotation and wherein the leading slot wall surface is parallel to the trailing slot wall surface. Lemos teaches a device comprising cutting slots (34) connected to a cavity (24) including a trailing slot wall surface (37) defining a cutting edge at an acute angle relative to the outside of the anchoring portion with the radial direction and the trailing slot wall surface sloping obliquely forward from within and outwardly in the direction of rotation (36) and wherein the leading slot wall surface (33) is parallel to the trailing slot wall surface in order to increase the migration of material to the cavity (column 6 lines 7-20). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Branemark wherein the trailing slot wall surface and the leading slot wall surface are provided at an angle in view of Lemos in order to increase the migration of material to the cavity.

The device of Branemark as modified by Lemos discloses the invention as claimed except for the angle at the radially outer end of the trailing slot wall surface is 20-40 degrees, the angle at the radially outer end of the trailing slot wall surface is 27-33 degrees, the plurality of slots includes 5-7 slots, and the slot width at the radially outer end of the slot corresponds to 15-35 percent of the peripheral distance between two slots on the outside of the device. Regarding the angle being 20-40 degrees or 27-

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33 degrees, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Branemark as modified by Lemos wherein the angle is 20-40 degrees or 27-33 degrees, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding the plurality of slots includes 5-7 slots, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Branemark as modified by Lemos wherein the plurality of slots includes 5-7 slots, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding the slot width at the radially outer end of the slot corresponds to 15-35 percent of the peripheral distance between two slots on the outside of the device, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Branemark as modified by Lemos wherein the slot width at the radially outer end of the slot corresponds to 15-35 percent of the peripheral distance between two slots on the outside of the device., since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Response to Arguments

4. Applicant's arguments with respect to claims 11-14, 16-20, 22-34, and 36 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for cited references the examiner felt were relevant to the application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Woodall whose telephone number is (571)272-5204. The examiner can normally be reached on Monday to Friday 8:00 to 5:30 EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas Woodall/
Examiner, Art Unit 3775
/Eduardo C. Robert/
Supervisory Patent Examiner, Art Unit 3733